Monday, 11 Dec 2006, 11:30 – 12:30 p.m.

Opening of the Workshop

Keynote Lecture – *Prof. Hamid R Sharif*

Monday, 11 Dec 2006, 1:30 – 3:00 p.m.

Session I: Coding Theory

1. More New Rate-Compatible Punctured Convolutional Codes for Viterbi Decoding*, L. H. C. Lee and J. Sodha*
2. Computing the information rates for a class of polynomial codes, *Andrei Kelarev*
3. Design of LDPC Codes Based on Generalized Difference-Set Cyclic Codes, *Jinhong Yuan*
4. Variable Length Coding for H.264/AVC Annex F, *Justin Ridge, Marta Karczewicz, Xianglin Wang, Yiliang Bao*
5. Improvement on Fractal Image Coding Based on the Difference Image, *Huaqing Wang, Xiangjian He, Qiang Wu, and Tom Hintz*

Monday, 11 Dec 2006, 3:30 – 5:00 p.m.

Session II: MIMO Systems

1. Joint Carrier Frequency Offset and IQ Imbalance Compensation for MIMO OFDM, *Elie Saad, Cedric Dehos*
2. Test-Bed for Evaluation of Antenna and System Performance for Dual Polarized MIMO Systems, *L. de Haro-Ariet, C. Gómez-Calero, L. García-García and J. Mora-Cuevas*
3. Frequency-domain Adaptive Iterative Receiver for Space-time Coded MIMO Systems, *Somsak Khempetch and Chakree Teekapakvisit*
4. Underdetermined Channel Estimation for MIMO-OFDM Systems, *Franklin Mung'au Kai-Kit Wong*
5. Efficient Simulation of Space-Time Block Coded Systems, *Kim Chi Nguyen, Upul Gunawardana and Ranjith Liyana-Pathirana*
6. A Novel Detection Algorithm for MIMO Communication Receivers, *H. Keivani*

Tuesday, 12 Dec. 2006, 9:00 – 10:30 a.m.

Session III: Wireless Ad-Hoc and Sensor Networks

1. An Energy Efficient MAC-PHY Approach to Support Distributed Source Coding in Wireless Sensor Network, *Wei Wang, Dongming Peng, Honggang Wang, Hamid Sharif Tadeusz A Wysocki, Beata J Wysocki*
2. Design and Implementation of a Modular Wireless Sensor Network Sniffer, *John C. McEachen, Teo Hong Siang, and Georgios Kirykos*

3. A Comparison of Optimized Link State Routing with Traditional Ad-hoc Routing Protocols, *Gore Phee Lye and John C. McEachen*
4. A Survey on Cross-Layer Optimisations for Wireless Sensor Networks, *K. Almi'ami and S. Selvakennedy*
5. Capacity of Single-Radio Ad-hoc Networks Handling High Bit Rate Real-time Internet Applications, *Mehran Abolhasan, Tadeusz Wysocki, Daniel Franklin and Justin Lipman*

Tuesday, 12 Dec. 2006, 11:00 a.m. – 12:30 p.m.

Session IV: Signal Processing

1. Channel Decorrelation for Stereo Acoustic Echo Cancellation in High-Quality Audio Communication, *Jean-Marc Valin*
2. Joint IQ Mismatch Compensation and Acquisition Algorithm for MBOA Systems, *C. Dehos, D. Morche P. Conti, P. Busson, G. Provins*
3. On the Design and Implementation of Adaptive Equalizer in Parallel Streams, *Balachander Ramamurthy and Bill Cowley*
4. Simultaneous Biometric Verification and Random Number Generation, *V. Chandran and B. Chen*
5. Active-parameter detection guided decision-based adaptive NLMS equalization between training periods, *Yan Wu Jennifer, John Homer*

Wednesday, 13 Dec. 2006, 9:00 – 10:30 a.m.

Session V : Networking

1. Novel Stream Authentication Scheme for Securing Voice over IP, *Tao Mai, Willy Susilo and Yi Mu*
2. Extending XCP for QoS aware flows in High Bandwidth-delay Product Networks, *Fariza Sabrina and Glynn Rogers*
3. The Performance of ST-PD TCP in Wireless Environments, *Wei Xu, Qiang Fu, Grenville Armitage*
4. Spreading Gain Optimisation for Minimising the Energy of CDMA Based MANETs, *Shamim A. Joarder, Sylvie Perreau, Aruna Jayasuriya*

Wednesday, 13 Dec. 2006, 11:00 a.m. – 12:30 p.m.

Session VI: Wireless Systems I

1. On the Variances of the Residual Multiple Access Interference for the Total and the Weighted Parallel Interference Cancellation Receivers, *Emmanuel Oluremi Bejide*
2. Intersymbol Interference Analysis for Indoor Wireless Optical Channels, *Xia Li and Jean Armstrong*
3. Interference Reduction and Analysis for Asynchronous MCCDMA Using a Dual Frequency Switching Technique, *Xuan Li Dan Carey Bouchra Senadji*
4. A New Adaptive Power Control Algorithm for UMTS, *Rachod Patachaianand, Kumbesan Sandrasegaran*

5. Direct Sequence Modified Time Hopping PPM over Ultra Wideband S-V Channel, *Peter Vial, Beata Wysocki and Tad Wysocki*

Wednesday, 13 Dec. 2006, 1:30– 3:00 p.m.

Session VII: Wireless Systems II

1. Pilot-Assisted Semi-Blind Carrier Frequency Offset Estimation for OFDM Flat Fading Channels, *Qi Cheng*
2. Pseudonoise Steganography Data Transsmission over Digital Channels, *Jerzy Lopatka, Jarosław Michalak, Zbigniew Piotrowski*
3. Access Priority Schemes in Random Access Channel of OFDMA-based Wireless Communication Systems, *Seokjoo Shin and Jeungmin Joo*
4. The Effect of Polarization on the Performance of Steered Beam Adaptive Array Antennas, *Amin Al-Ka'bi, John Homer, and Marek Bialkowski*
5. Information Rates of Time-Varying Rayleigh Fading Channels in Non-Isotropic Scattering Environments*, Rauf Iqbal, Thushara D. Abhayapala, and Tharaka A. Lamaheva*

Poster Session, Tuesday 12 Dec. 2006, 1:30 – 3:00 p.m.

1. An Error Concealment Algorithm in Wireless Networks, *Congying Wei, Jianwei Niu, Jianping Hu*
2. A System for The 3D Reconstruction of the Human Face Using the Structured Light Approach, *D. Mcguire, P. Premaratne*
3. A Noise Tolerant Spam Email Detection Engine, *Dat Tran, Wanli Ma and Dharmendra Sharma*
4. Objective Evaluation of Multiple Artefacts using a Single Synthetic Test Pattern, *Amal Punchihewa*
5. A Flexible Autonomic Management Architecture for Wireless Sensor Networks, *Yazeed Al-Obaisat, Robin Braun*
6. An Water-filling Algorithm for Power-Line Communication Systems subject to Individual Channel Power Constraints, *Danchi Jiang*
7. Achieving an Excellent Quality of Service for HDTV over a DSL-WLAN scenario, *Frederik Vanhaverbeke, Frederik Simoens, Marc Moeneclaey, and Danny De Vleeschauwer*
8. Using Policy Mechanisms to Implement Autonomic Behaviour in Telecommunications Service Activation Processes, *Shane Magrath*
9. Performance Comparison of the AODV, SAODV and FLSL Routing Protocols in Mobile Ad Hoc Networks, *Lu Jin, Zhongwei Zhang, Hong Zhou*
10. Improving the Performance of SCTP Transport Protocol over Wireless Networks, *Zhongwei Zhang and Lu Jin*
11. Skill Acquisition through Data Mining of Inertial Signals, *Chao, David Stirling, Naghdy*
12. Wireless Sensor Networks–Routing Protocol Selection for Applications, *Y.Li, T.Newe*
13. Detecting Route Request Flooding Attacks in Mobile Ad Hoc Networks, *Yinghua Guo and Steven Gordon*
14. Aggregate Flows – for Efficient Management of Large Flows in the Internet, *R. G. Addie, S. Braithwaite, J. das Gupta and J. Leis*
15. Experimental Evaluation of AODV in a Hybrid Wireless Mesh Network, *Peizhao Hu, Asad Amir Pirzada, and Marius Portmann*
16. Automatic Remote Surveillance using Ubiquitous Wireless Devices based on a Novel Algorithm, *Anton G Pereira, Liyanage C De Silva, Amal Punchihewa*
17. A Survey of Operating Systems for Wireless Sensor Nodes, *M. Healy, T. Newe, E. Lewis*
18. A Unified Micro-Cellular Network; High Bit-Rate Packet Transfer to Fast Terminals Without Congestion, *Takahiko Yamada, Tomoyuki Izumi, Satoshi Yamashita, Yusuke Kohara and Phan Thanh Hoa*
19. Using RFID and Bluetooth for Localised Interaction with Wireless Embedded Internet Devices, *Matthew D'Souza, Montserrat Ros, and Adam Postula*